

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

(Use as many sheets as necessary)

of 7

| | |
|------------------------|------------|
| Application Number | 10/735,862 |
| Filing Date | 12/12/2003 |
| First Named Inventor | Hong Po |
| Art Unit | 2874 |
| Examiner Name | Sung H Pak |
| Attorney Docket Number | NU-208WO-1 |

[illegible]

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|---|------------------|---|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ^o |
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | MM-DD-YYYY | | | |
| SP | | EP 0 954 072 B1 | 04-12-2000 | Lucent | | |
| CP | | WO 03/005068 A3 | 04-10-2003 | OPS Inc. | | |
| SP | | WO 03/014771 A2 | 02-20-2003 | OPS Inc. | | |
| SP | | WO 03/014771 A3 | 08-12-2004 | OCG Tech. Lic. | | |
| SP | | WO 02/093704 A1 | 11-21-2002 | OPS Inc. | | |
| SP | | WO 02/063728 A2 | 08-15-2002 | Laserssharp Corp | | |

**Examiner
Signature**

Sunny Pak

Date
Considered

12/14/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

| | |
|--------------------|------------|
| Application Number | 10/735.862 |
|--------------------|------------|

| | |
|--------------------|------------|
| Filing Date | 12/12/2003 |
|--------------------|------------|

| | |
|----------------------|---------|
| First Named Inventor | Hong Po |
|----------------------|---------|

| | |
|----------|------|
| Art Unit | 2874 |
|----------|------|

| | |
|---------------|------------|
| Examiner Name | Sung H Pak |
|---------------|------------|

| | |
|------------------------|------------|
| Attorney Docket Number | NU-208WO-1 |
|------------------------|------------|

Sheet 3 of 7

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

| FOREIGN PATENT DOCUMENTS | | | | | | T ^o |
|--------------------------|-----------------------|---|--------------------------------|---|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | |
| | | Country Code ² -Number ⁴ -Kind Code ⁵ (if known) | | | | |
| SP | | WO 02/063728 A3 | 03-13-2003 | Laserssharp Corp | | |
| SP | | WO 02/063728 A3 | 05-22-2003 | OPS Inc. | | |
| SP | | WO 01/33285 A2 | 05-10-2001 | SDL Inc. | | |
| SP | | WO 01/33285 A3 | 05-10-2001 | SDL Inc. | | |
| SP | | WO 99/50941 | 10-07-1999 | Randwidth Soln. | | |
| SP | | WO 96/37936 | 11-28-1996 | Imperial Coll. | | |

**Examiner
Signature**

Sung Pak

Date Considered

12/14/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

(Use as many sheets as necessary)

Sheet 4 of 7

| | |
|------------------------|------------|
| Application Number | 10/735,862 |
| Filing Date | 12/12/2003 |
| First Named Inventor | Hong Po |
| Art Unit | 2874 |
| Examiner Name | Sung H Pak |
| Attorney Docket Number | NU-208WO-1 |

[illegible]

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|---|------------------|---|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ^d |
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | MM-DD-YYYY | | | |
| SP | | JP 1196189 (abs) | 08-07-1989 | Nippon Telegr. | | |
| SP | | JP 63202085 (abs) | 08-22-1988 | Nippon Telegr. | | |
| SP | | JP 59165488 (abs) | 09-18-1984 | Nippon Denki | | |
| SP | | JP 58121694 (abs) | 07-20-1983 | Nippon Denki | | |
| | | | | | | |
| | | | | | | |

| | |
|--------------------|-------------------|
| Examiner Signature | <i>Sunny Park</i> |
|--------------------|-------------------|

| | |
|------------|--|
| Date | |
| Considered | |

12/14/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

| | |
|------------------------|------------|
| Application Number | 10/735,862 |
| Filing Date | 12/12/2003 |
| First Named Inventor | Hong Po |
| Art Unit | 2874 |
| Examiner Name | Sung H Pak |
| Attorney Docket Number | NU-208WO-1 |

Sheet

5

of

7

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|---|----------------|
| SP | | CHANG et al.; "Cascaded Raman fibre laser for stable dual-wavelength operation"; Electronics Letters 7th June 2001, Vol. 37, No. 12, p. 740-741 | |
| ↑ | | CHANG et al.; "Dual-wavelength cascaded Raman fibre laser"; Electronics Letters 3rd August 2000, Vol. 36, No. 16, p. 1356-1358 | |
| | | CHANG et al.; "Cascaded Raman fibre laser operating at 1.48um"; Electronics Letters 28th October 1999, Vol. 35, No. 22, p. 1951-1952 | |
| | | CHERNIKOV et al.; "Raman fibre laser operating at 1.24um"; Electronics Letters 2nd April 1998, Vol. 34, No. 7, p. 680-681 | |
| | | PERSEPHONIS et al.; "Cascaded CW fibre Raman laser source 1.6-1.9um"; Electronics Letters 1st August 1996, Vol. 32, No. 16, p. 1486-1487 | |
| | | CHERNIKOV et al.; "High-gain, monolithic, cascaded fibre Raman amplifier operating at 1.3um"; Electronics Letters 16th March 1995, Vol. 31, No. 6, p. 472-473 | |
| | | STENTZ et al.; "Figure-eight fibre laser with largely unbalanced central coupler"; Electronics Letters 4th August 1994, Vol. 30, No. 16, p. 1302-1303 | |
| | | DEMIDOV et al.; "Three-wavelength Raman fiber laser with reliable dynamic control"; Optics Letters, Vol. 28, No. 17, September 1 2003, p. 1540-1542 | |
| ↓ | | DIANOV et al.; "Three-cascaded 1407-nm Raman laser based on phosphorus-doped silica fiber"; Optics Letters, Vol. 25, No. 6, March 15 2000, p. 402-404 | |
| SP | | STENTZ et al.; "Polarization effects and nonlinear switching in fiber figure-eight lasers"; Optics Letters, Vol. 19, No. 18, September 15 1994, p. 1462-1464 | |

| | | | |
|--------------------|----------|-----------------|----------|
| Examiner Signature | Sung Pak | Date Considered | 12/14/04 |
|--------------------|----------|-----------------|----------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

| | |
|------------------------|------------|
| Application Number | 10/735,862 |
| Filing Date | 12/12/2003 |
| First Named Inventor | Hong Po |
| Art Unit | 2874 |
| Examiner Name | Sung H Pak |
| Attorney Docket Number | NU-208WO-1 |

Sheet 6

of 7

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|---|----------------|
| SP | | LEWIS et al.; "Fibre-optic tunable CW Raman laser operating around 1.3um"; Optics Communications 182 (2000) 403-405 | |
| | | PRABHU et al.; "Simultaneous two-color CW Raman fiber laser with maximum output power of 1.05W / 1239nm and 0.95W / 1484 nm etc."; Optics Communications 182 (2000) 305-309 | |
| | | CHANG et al.; "Efficient cascaded Raman generation and signal amplification at 1.3um in GeO2-doped single-mode fibre"; Optics Communications 142 (1997) 289-293 | |
| | | XU et al.; "Output characteristics of a fibre Raman laser with a composite GeO2 and P2O5-doped silica fibre"; Journal of Modern Optics, 2001, Vol. 48, No. 7, 1269-1279 | |
| | | KIDORF et al.; "Pump Interactions in a 100-nm Bandwidth Raman Amplifier"; IEEE Photonics Technology Letters, Vol. 11, No. 5, May 1999, p. 530-532 | |
| | | JAIN et al.; "A tunable multiple Stokes cw fiber Raman oscillator"; Applied Physics Letters, Vol. 31, No. 2, 15 July 1977, p. 89-90 | |
| | | HILL et al.; "Low-threshold cw Raman laser"; Applied Physics Letters, Vol. 29, No. 3, 1 August 1976, p. 181-183 | |
| | | CHANG et al.; "A novel intra-cavity for efficient cascaded Raman generation using WDM couplers"; OFC 2001, Anaheim; WDD14-1 | |
| | | PAPERNYI et al.; "Efficient dual-wavelength Raman fiber laser"; OFC 2001, Technical Digest, WDD15-1 | |
| SP | | MERMELSTEIN et al.; "A High-Efficiency Power-Stable Three-Wavelength Configurable Raman Fiber Laser"; OFC 2001, Anaheim, Post Deadline, PD3-1 | |

| | | | |
|--------------------|-----------------|-----------------|----------|
| Examiner Signature | <i>Sung Pak</i> | Date Considered | 12/14/04 |
|--------------------|-----------------|-----------------|----------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

| | |
|------------------------|------------|
| Application Number | 10/735,862 |
| Filing Date | 12/12/2003 |
| First Named Inventor | Hong Po |
| Art Unit | 2874 |
| Examiner Name | Sung H Pak |
| Attorney Docket Number | NU-208WO-1 |

Sheet

7

of

7

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|---|----------------|
| SP | | CHERNIKOV et al.; "Broadband Raman amplifiers in the spectral range of 1480-1620 nm"; OFC 1999, WG6-1/117 | |
| SP | | DEMIDOV et al.; "Optical Fiber Amplifier"; US Patent Application 10/771,002 filed 02/03/04 | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|--------------------|-----------------|-----------------|----------|
| Examiner Signature | <i>Sung Pak</i> | Date Considered | 12/14/04 |
|--------------------|-----------------|-----------------|----------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.